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EXAMINER	
SYKES, ALTREV C	

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1794	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,082	Applicant(s) OCHI ET AL.	
	Examiner ALTREV C. SYKES	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _17 August 2009_.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1,4,7,8,10-12,14-21,23,24,27-34,39-41,46,47,53,56,57 and 59_ is/are pending in the application.

4a) Of the above claim(s) _14,15,20,21,23,24,27-34,39-41,46 and 47_ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,4,7,8,10-12,16-19,53, 56-57, 59_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment to the claims filed August 17, 2009 is acknowledged by examiner and has been entered. Claim 1 has been amended and claim 58 cancelled.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 4, 7, 8, 10-12, 16-19, 53, and 56-59 have been considered but are moot. A new grounds of rejection is made in view of a different interpretation of previously applied prior art and newly found prior art.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 10, 11 and 53 are rejected under 35 U.S.C. 102(a) as being anticipated by Li et al. *Electrospinning of Polymeric and Ceramic Nanofibers as Uniaxially Aligned Arrays*.

Regarding claims 1 and 53, Li et al. discloses a simple and versatile method that generated uniaxially aligned nanofibers over large areas by introducing a gap into the conventional collector. (See Col 2, lines 25-28) Examiner notes that Li et al. also discloses Reneker et al. have shown that the as-spun fibers could be aligned more or less parallel to each other when a drum rotating at high speed was used as the collector. (See Col 2, lines 6-8) As such, the alignment of nanofibers would have been well known in the art at the time of the invention. Li et al. discloses the schematic setup used for the electrospinning experiments is essentially the same as the conventional configuration except for the use of a collector containing a gap in its middle. Such a collector could be simply fabricated by putting two stripes of electrical conductors (e.g., metals and highly doped silicon) together or by cutting a piece of aluminum foil. The width of the gap could be varied from hundreds of micrometers to several centimeters. (See Col 3, first paragraph) Li et al. discloses PVP uniaxially aligned nanofibers. (See Figures 2A and B) Li et al. discloses by using this simple setup, PVP nanofibers with diameters ranging from tens of nanometers to several micrometers have been prepared as uniaxially aligned arrays by fine-tuning the conditions for electrospinning. (See Col 5, first full paragraph) Li et al. discloses fabrication of uniaxially aligned nanofibers up to several centimeters in length. These nanofibers could also be transferred to other substrates for subsequent treatments and applications. (See Col 5, last sentence of second paragraph)

The average diameter of these fibers was 80 nm. (See Col 6, first full sentence) According to the instant specification single fibers in a range from $1*10^{-7}$ to $2*10^{-4}$ dtex in single fiber fineness are equivalent to single fiber diameter from 1 to 150 nm. (See [0122]) According to the instant specification single fibers in a range from $1*10^{-7}$ to $1*10^{-4}$ dtex in single fiber fineness are equivalent to single fiber diameter from 1 to 100 nm. (See [0124]) As such, examiner has sufficient reason to believe that the aligned nanofibers as disclosed by Li et al. would inherently have the single fiber fineness by number average as claimed by applicant. Therefore, the aggregate of nanofibers as claimed by applicant is anticipated by the prior art.

Regarding claim 10, one of ordinary skill in the art would expect for the aligned polymer nanofibers of Li et al. would have a rate of elongation at absorbing water as claimed by applicant since the structure of the aligned nanofibers have been shown to be substantially similar to that of the aggregate claimed by applicant.

Regarding claim 11 and 16, Li et al. discloses it is worth mentioning that organic functional molecules (e.g., dyes), biomolecules, and nanoparticles (e.g., superparamagnetic iron oxides) could also be easily incorporated into the electrospinning solutions to generate uniaxially aligned nanofibers with desired functionalities. (See Col 6, second full sentence) Therefore, examiner notes that Li et al. anticipates the use of a functional chemical agent.

Regarding claims 12 and 17, Li et al. discloses 1D nanostructures. (See Col 7, first full paragraph) Li et al. also discloses the uniaxially aligned arrays of nanofibers could be stacked in a layer-by-layer fashion to generate a 3D grid structure. (See Col 6, first full paragraph) As such, examiner notes that a fibrous material resembling a felt would result.

5. Claim 1, 10 and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Deitzel et al. C*ontrolled deposition of electrospun poly(ethylene oxide) fibers*.

Regarding claims 1 and 53, Deitzel et al. discloses the deposition of sub-micron polymer fibers (<300 nm in diameter) on a substrate through the use of an electrostatic lens element and collection target of opposite polarity. (See Abstract) Deitzel et al. discloses the objective is to construct an electrospinning apparatus that uses electrostatic fields, to dampen the bending instability inherent in the electrospinning process. (See Col 4, first paragraph) Deitzel et al. discloses yarns of electrospun fibers used in WAXD experiments were collected using a combing technique. (See Col 7, second paragraph) Therefore, examiner notes that utilizing a combing technique would align the fibers in one dimension over a definite length. Deitzel et al. discloses by dampening the chaotic motion of the jet, it becomes possible to deposit electrospun fibers on a substrate in a more targeted fashion. When the target is a rotating drum covered

with copper foil and charged, the electrospun fibers are collected in a strip. (See Col 12, first full paragraph) Deitzel et al. also discloses it is possible to collect the electrospun fibers in the form of a yarn with the multiple field apparatus. (See Col 13, first full paragraph) Deitzel et al. discloses a fiber mat is obtained. (See Fig. 7b and Col 11, second sentence) According to the instant specification single fibers in a range from $1*10^{-7}$ to $2*10^{-4}$ dtex in single fiber fineness are equivalent to single fiber diameter from 1 to 150 nm. (See [0122]) According to the instant specification single fibers in a range from 1 * 10 -7 to $1 * 10^{-4}$ dtex in single fiber fineness are equivalent to single fiber diameter from 1 to 100 nm. (See [0124]) As the single fiber diameter of Deitzel et al. overlaps that of the single fiber diameter range as claimed by applicant, the prior art anticipates the single fiber fineness by number average as claimed.

Regarding claim 10, one of ordinary skill in the art would expect for the aligned polymer nanofibers of Deitzel et al. would have a rate of elongation at absorbing water as claimed by applicant since the structure of the aligned nanofibers have been shown to be substantially similar to that of the aggregate claimed by applicant.

6. Claims 1, 10 and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Theron et al. *Electrostatic field-assisted alignment of electrospun nanofibres*.

Regarding claim 1 and 53, Thereon et al. discloses electrostatic field-assisted assembly techniques combined with an electrospinning process used to position and align individual nanofibres (NFs) on a tapered and grounded wheel-like bobbin. The bobbin is able to wind a continuously as-spun nanofibre at its tip-like edge. The alignment approach has resulted in polyethylene oxide-based NFs with diameters ranging from 100–300 nm and lengths of up to hundreds of microns. The results demonstrate the effectiveness of this new approach for assembling NFs in parallel arrays while being able to control the average separation between the fibres. (See Abstract) According to the instant specification single fibers in a range from $1*10^{-7}$ to $2*10^{-4}$ dtex in single fiber fineness are equivalent to single fiber diameter from 1 to 150 nm. (See [0122]) According to the instant specification single fibers in a range from 1 * 10 -7 to 1 * 10^{-4} dtex in single fiber fineness are equivalent to single fiber diameter from 1 to 100 nm. (See [0124]) As the single fiber diameter of Theron et al. overlaps that of the single fiber diameter range as claimed by applicant, the prior art anticipates the single fiber fineness by number average as claimed. Therefore, examiner notes that the fibers would be aligned in one dimension over a definite length. (See Introduction, first paragraph)

Regarding claim 10, one of ordinary skill in the art would expect for the aligned polymer nanofibers of Thereon et al. would have a rate of elongation at absorbing water as claimed by applicant since the structure of the aligned

nanofibers have been shown to be substantially similar to that of the aggregate claimed by applicant.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 4, 7, 8, 56, 57 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al. *Electrospinning of Polymeric and Ceramic Nanofibers as Uniaxially Aligned Arrays*.

Regarding claims 4, 8, and 56 Li et al. does not teach 50% or more of single fibers are in a section having a width of 30nm in diameter. Li et al. does not teach an aggregate that has a strength of 1 cN/dtex or higher. Li et al. discloses the uniaxial alignment was achieved by collecting the electrospun nanofibers

over a gap formed between two conductive substrates. As a result of electrostatic interactions, the nanofibers were stretched to form a parallel array across the gap. (See Col 8, first full paragraph) Li et al. discloses the width of the gap could be varied from hundreds of micrometers to several centimeters. (See Col 3, first paragraph) Li et al. discloses narrower gaps and longer collection times both led to the formation of denser arrays. (See Col 5, second paragraph) As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the width of the aggregate since it has been held that, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). The burden is upon the Applicant to demonstrate that the claimed width of the aggregate is critical and has unexpected results. In the present invention, one would have been motivated to optimize the width of the aggregate motivated by the desire to obtain denser arrays. (See Col 5, second paragraph) Therefore, examiner notes that the strength of the array would be dependent on the density of the array and the packing of the aligned fibers. Therefore, one of ordinary skill in the art would expect that the two parameters would be optimized simultaneously.

Regarding <u>claim 7 and 57</u>, Li et al. specifically teaches this procedure has also been extended to generate uniaxially aligned nanofibers from a rich variety of polymers other than PVP, with typical examples including poly-(ethylene oxide),

polystyrene, and polyacrylonitrile. (See Col 5, first sentence of third paragraph) While Li et al. is not explicit to the thermoplastic polymers as claimed by applicant, a prima facie case of obviousness exists for one of ordinary skill in the art at the time of the invention to substitute one polymer material for another motivated by expected success since the Li et al. reference teaches a rich variety of polymers may be used.

Regarding claim 59, Li et al. discloses fabrication of uniaxially aligned nanofibers up to several centimeters in length. (See Col 5, last sentence of second paragraph) Li et al. discloses the uniaxial alignment was achieved by collecting the electrospun nanofibers over a gap formed between two conductive substrates. As a result of electrostatic interactions, the nanofibers were stretched to form a parallel array across the gap. (See Col 8, first full paragraph) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the orientation in one dimension to be at least several meters since Li et al. is not explicit as to a definite length.

10. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al. *Electrospinning of Polymeric and Ceramic Nanofibers as Uniaxially Aligned Arrays* in view of Gogins et al. (US 2004/0116025).

Regarding claims 18 and 19, Li et al. discloses all of the claim limitations as set forth above, but the reference does not specifically disclose laminating the stacked nonwoven nanofibers with a sheet of other nonwoven fabric.

Gogins et al. discloses a fabric can be used as protective suits or clothing or other barrier uses such as containers of hazardous materials. (See [0008] and [0030]) Gogins et al. discloses nanofibers can be arranged in structures that are very efficient barriers to aerosol particles, but still allow excellent air permeability. (See [0011]) Gogins et al. discloses the multilayer fabric typically comprises a fine fiber layer. These fine fibers can be produced by a number of means including electrostatic spinning, melt spinning, melt blowing, or splittable "islands in a sea" methods. (See [0031]) Gogins et al. discloses polymeric compositions with improved properties that can be used in a variety of applications including the formation of nanofibers, fiber webs, fibrous mats, etc. (See [0040]) Gogins et al. discloses the multilayer fabric typically includes an outer shell, either a woven or non-woven material that can act to protect the fine fiber layer from damage, contamination or wear. Often the outer shell is combined with the fine fiber layer using a variety of manufacturing techniques; however, such a combination is preferably manufactured using either direct application or adhesive lamination technology. In other multilayer constructions, the fine fiber layer might be layered next to shell material, and not laminated. For example, the fine fiber layer might

be sewn together with the shell. The shell should be understood to be the outer layer of this protective material, it may of course be worn in many configurations with other garments, including as an undergarment. (See [0032] and [0055])

As Li et al. and Goggins et al. are both directed to structures comprising nanofibers produced by an electrospinning method, the art is analogous. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the stacked structure as disclosed by Li et al. in the multi-layered fabric as taught by Goggins et al. motivated by the desire to provide efficient barriers to aerosol particles, but still allow excellent air permeability. (See [0011])

11. Claims 7, 11, 12, 16-19 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deitzel et al. C*ontrolled deposition of electrospun poly(ethylene oxide) fibers* as in view of Gogins et al. (US 2004/0116025).

Regarding claim 7, Deitzel et al. is not explicit to the thermoplastic polymers as claimed. As demonstrated by Gogins, polymeric compositions such as polyolefin, polyamide, and polyester are known to be adequate for electrospinning. (See [0038]).

As Deitzel et al. and Gogins et al. are both directed to fine polymer fibers, the art is analogous. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use polyolefin, polyamide or polyester as the thermoplastic material used to create nanofiber aggregate using the techniques of the Deitzel et al. motivated by the expectation of a predictable result of substituting one polymer for another which are both suitably electrospun.

Regarding claims 11 and 16, Deitzel et al. does not disclose a functional chemical agent. Gogins et al. discloses the fine fiber can be made of a polymer material or a polymer plus additive. (See [0052]) Gogins et al. discloses the resistance to the effects of heat, humidity, impact, mechanical stress and other negative environmental effect can be substantially improved by the presence of additive materials. (See [0054])

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize an additive material (i.e. functional chemical agent) in the polymer materials used in the electrospinning process of Deitzel et al. motivated by the desire to tailor the fabric with respect to resistance to the effects of heat, humidity, impact, and mechanical stress. (See [0054])

Regarding claims 12 and 17, Deitzel et al. discloses fiber mats and yarns are analyzed after the completed electrospinning process. (See Abstract) Therefore, it would have been obvious to one of ordinary skill in the art to utilize the aggregate of nanofibers as taught by Deitzel et al. in a fibrous material as claimed by applicant.

Regarding claims 18 and 19, Deitzel et al. discloses electrospinning has been known to be used for electrospun textiles for protective clothing and filtration applications. Other applications that are being explored include scaffolding for tissue growth, and optical and electronic applications. (See Col 1, second paragraph) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the electrospinning process of Deitzel to produce aligned nanofibers which could be used in at least the same capacity as that of the polymer nanofibers already known in the art.

Regarding claim 59, Deitzel et al. does not specifically disclose that the orientation of the nanofibers extend in one dimension for at least several meters. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the orientation in one dimension to be at least several meters motivated by intended use since Deitzel et al. discloses that the

nanofibers are known to be used in various end products. (See Col 1, second paragraph)

12. Claims 11, 12, 16-19, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theron et al. *Electrostatic field-assisted alignment of electrospun nanofibres* in view of Deitzel et al. C*ontrolled deposition of electrospun poly(ethylene oxide) fibers* .

Regarding claims 12 and 17-18, Theron et al. is not explicit to the use of the nanofibers in a fibrous material.

Deitzel et al. discloses fiber mats and yarns are analyzed after the completed electrospinning process. (See Abstract) Deitzel et al. discloses electrospinning has been known to be used for electrospun textiles for protective clothing and filtration applications. Other applications that are being explored include scaffolding for tissue growth, and optical and electronic applications. (See Col 1, second paragraph)

As Theron and Deitzel et al. are both directed to modified electrospinning processes to produce polymer nanofibers, the art is analogous. Therefore, it would have been obvious to one of ordinary skill in the art to utilize the aggregate

of nanofibers as taught by Theron et al. in a fibrous material as claimed by applicant. Additionally, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the electrospinning process of Theron to produce aligned nanofibers which could be used in at least the same capacity as that of the polymer nanofibers already known in the art as taught by Deitzel.

Regarding claim 59, Theron et al. does not specifically disclose that the orientation of the nanofibers extend in one dimension for at least several meters. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the orientation in one dimension to be at least several meters of Theron motivated by intended use since Deitzel et al. discloses that the nanofibers are known to be used in various end products. (See Col 1, second paragraph)

13. Claims 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theron et al. *Electrostatic field-assisted alignment of electrospun nanofibres* in view of Deitzel et al. C*ontrolled deposition of electrospun poly(ethylene oxide) fibers* and further in view of Gogins et al. (US 2004/0116025).

Regarding claim 7, modified Theron et al. is not explicit to the thermoplastic polymers as claimed. As demonstrated by Gogins, polymeric compositions such

as polyolefin, polyamide, and polyester are known to be adequate for electrospinning. (See [0038]).

As modified Theron et al. and Gogins et al. are both directed to fine polymer fibers, the art is analogous. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use polyolefin, polyamide or polyester as the thermoplastic material used to create nanofiber aggregate using the techniques of the modified Theron et al. motivated by the expectation of a predictable result of substituting one polymer for another which are both suitably electrospun.

Regarding claims 11 and 16, modified Theron does not disclose a functional chemical agent. Gogins et al. discloses the fine fiber can be made of a polymer material or a polymer plus additive. (See [0052]) Gogins et al. discloses the resistance to the effects of heat, humidity, impact, mechanical stress and other negative environmental effect can be substantially improved by the presence of additive materials. (See [0054])

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize an additive material (i.e. functional chemical agent) in the polymer materials used in the electrospinning process of modified Theron

et al. motivated by the desire to tailor the fabric with respect to resistance to the effects of heat, humidity, impact, and mechanical stress. (See [0054])

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALTREV C. SYKES whose telephone number is (571)270-3162. The examiner can normally be reached on Monday-Thursday, 8AM-5PM EST, alt Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ACS/
Examiner
12/2/09

/Jennifer A Chriss/
Primary Examiner, Art Unit 1794